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Internet financial reporting on the web in Indonesian: not just technical problem

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Abstract: The internet technology is increasingly important to disseminate financial information. The use of internet technology also allows corporate information to be presented in innovative ways rather than paper-based reporting.

The purpose of this study was to measure the quality of internet financial reporting of the banking industry, LQ-45 firms and firms which are not included in the banking industry and LQ-45 firms on the Jakarta Stock Exchange. The index is developed to favour the importance of technology rather than the content of financial statements. Therefore, in order to add weight to content over technology enhancements, the index criteria were divided into four parts and assigned weights – content (40%), timeliness (20%), technology (20%) and user support (20%).

The survey findings show that the nature of internet financial reporting disclosure varies considerably across the companies. Some website contains only product and service advertising. Most financial reporting is confined to PDF, which looks exactly like the paper-based annual reports. Moreover, the results have important implications for all parties involved in developing internet financial reporting and also indicate avenues for further research.

Keywords: internet; disclosure; financial reporting; internet financial reporting.

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1 Introduction

Internet financial reporting (IFR) is a recent but fast-growing phenomenon. Many companies worldwide publish their corporate financial information on the internet. Financial information provided on the web includes comprehensive sets of financial statements, including footnotes; partial sets of financial statements; and/or financial highlights that may include summary financial statements or extracts from such statements. Recent studies document the practice of such reporting among companies in a number of countries. This practice is expected to grow to the extent that financial reporting in the near future will move entirely from the current primarily print-based mode to using the internet as the primary information dissemination channel.

The emerging capital market in Indonesia makes investor need more information not only paper-based financial reporting but the whole information of public company. The internet is also increasingly important for financial reporting. The majority of the largest listed companies in developed countries now have an internet website to publish financial information. Potentially, the internet has the power to revolutionise external reporting. Company websites can include the traditional annual reports together with additional financial and non-financial information in multiple formats. The use of multimedia presentational formats also allows corporate information to be presented in innovative ways. The internet is also increasingly important for financial reporting. The majority of the largest listed companies in developed countries now have an internet website on which they publish financial information. The remainder of the paper is organised as follows. Section 2 briefly discusses the relevant literature. Data selection, research methodology, and empirical models are described in Section 3. Section 4 provides analysis and interpretations of the empirical findings and Section 5 concludes the paper.

2 Literature review

Pirchegger and Wagenhofer (1999) analyse the use of the internet to present financial information by Austrian companies listed in the most liquid market segment of the Vienna Stock Exchange. Ismail (2002) examine the extent of financial information disclosed on the internet by the Gulf Cooperation Council (GCC) countries. Oyelere et al. (2003) examine the voluntary adoption of the internet as a medium for transmitting financial reports and determinants of such voluntary practice by New Zealand companies. Wagenhofer (2003) examine two major economic effects created by the internet for financial accounting and disclosure.

Andrikopoulos and Diakidis (2007) examine the characteristics and the determinants of internet reporting practices of companies listed in the Cyprus Stock Exchange. The research approach was based upon the construction of an internet reporting Index that captured the content of disclosure with respect to financial and corporate governance information. Exploring the potential explanatory power of long-established determinants of voluntary disclosure they found that a company's size significantly affected the extent of internet disclosure, whereas other traditional explanatory factors, such as profitability and leverage did not have any significant effect on the disclosure practices of the companies listed in the Cyprus Stock Exchange.

Davey and Homkajohn (2004) review an empirical study into the extent and quality of IFR among the top 40 Thai listed companies. By measuring the IFR of the top 40 Thai Companies is was shown that, while most companies in the sample had websites and provided financial data on their sites, Thai companies still lag behind those in other advanced economies in communicating with stakeholders via electronic means. Most companies did not take full advantage of the computer technologies to add value to the financial disclosures. Most companies employ a rather conventional web presentation, with text and static graphics, equivalent to a paper presentation. In addition, there is substantial variation in the quality and extent of Thai firms' IFR practices. Some firms provide a full set of annual reports, while some ones present only summary financial statement. Quality pertaining to timeliness also varied with just as many firms providing timely data, as those who present outdated information.

Pervan (2005) examine the use of IFR on the 38 companies listed on stock markets of Croatia, this research shows that 20 companies have websites and 18 companies do not have a website. The results showed: *first*, from the 20 companies that has websites just 15 companies that publish their financial statements together with audit reports and financial statements show the previous period. *Second*, financial information delivery formats using HTML formatting there are seven companies and there are 14 companies PDF format, it reflects the practice of submission of financial information with the media PDF is a medium which is often used in developing countries.

Momany and Al Shorman (2006) tested the quality of IFR on companies listed on Jordan stock exchanges, this study shows that from 60 companies only 27 companies (45%) own website, with the largest proportion of firms in the service sector (77.8%) having a company website. The results show that firms in Jordan from 27 companies that have websites, only 19 companies that publish financial statements in the website and only six companies are presenting complete financial information on the company website.

Oyelere and Mohamed (2007) examine the quality of IFR in companies listed on the Oman stock market. Oyelere and Mohamed (2007) conducted observations of the 142 companies listed on Oman stock exchanges until June 2006, this study shows from 142 companies, 84 companies (59%) have websites, and 58 companies (41%) did not have a website. Of the 84 companies that have websites, 64 companies (76%) provide information on the history of the company and 67 companies (79%) provide information on services and Products Company. When compared to the financial information presented in the website, only 31 companies (37%) that presenting financial information in the company's website, this indicates that the IFR is a new phenomenon for companies listed on Oman stock markets. Oyelere and Mohamed (2007) showed that of 31 companies, only 23 companies (74%) which presents information on the financial statements during the two periods or more, and eight other companies (36%) only provide information on the financial statements during the first period. In the usage of HTML media, only six companies from 31 companies that deliver better financial information in PDF format or HTML.

Pervan and Filipovic (2008) examine the practice of IFR on the 35 listed firms go public in the Sarajevo stock market, the results showed that 24 companies have websites and 22 companies have an e-mail. Pervan and Filipovic (2008) showed that only seven companies (20%) publish the balance sheet; eight companies (22%) publish the statement of income; three companies (9%) publish cash flow; four companies (11%) publish the financial statements audited and only two companies (6%) who publish the accounting

policy on the company website. The results also indicate that information is often disclosed in a press releases company's website, while the stock price information, risk analysis, and the report of the board of directors are rarely disclosed in the company's website.

Victoria and Nicoleta (2008) examine the practices of IFR in European countries and the Middle East. The results of Victoria and Nicoleta (2008) showed that only 51 companies from 110 companies in developed countries, central and eastern European countries that have the disclosure practices of IFR ideal, including: provide information on local and English-speaking companies, provide information on company management and board directors.

Despina and Demetrios (2009) examine the practice of IFR 302 companies go public on the Athens stock exchange, using 57 criteria that describe the best disclosure practices at the company's website. Results of research conducted by Despina and Demetrios (2009) showed that 78.62% of companies disclose the financial highlights and 99.3% of firms disclose the prior period balance sheets at the company's website go public in Athens. On the other hand, research also shows that information is rarely disclosed by the companies go public in Athens is corporate social responsibility related information is shown only for 17:23% of companies that disclose information on Corporate Social Responsibility at the company's website.

Budi and Almilia (2008) measured the IFR of the 19 go public banks in Indonesia it was shown that, while most go public banks in the sample had websites and provided financial data on their sites. The survey findings show that the nature of IFR disclosure varies considerably across the sample banks. Almilia and Budi (2008) compare quality of banking industry and LQ-45 firms. Almilia and Budi (2008) used 19 banking industry and 35 LQ-45 firms as a samples. The statistic method used to compare IFR between banking sector and LQ-45 firms is independent sample t-test. The results show that banking sector has highest score on technology and user support component than LQ-45 firms.

2.1 *Information quality*

The quality of financial disclosures on the internet is an important issue. Unreliable financial information on the internet is less relevant or irrelevant for rational users, and can have detrimental impact on other users. Financial information generally has a higher degree of trustworthiness than other information because it is embedded in corporate governance mechanisms, and it is subject to auditing and enforcement. A major advantage of the internet it is flexibility, which, however, creates a disadvantage for credibility and authenticity. Data can easily be changed, often without leaving a trace, particularly if the website is dynamically linked with an underlying database. New information can be communicated not only by adding that information, but also by replacing the original information. For example, in the light of new events, why not revise a previous forecast in the latest directors' report? What about just changing the wording in the financial statements, at least for a few critical days?

Often, it is not so much the fact that data can be manipulated by a company, rather is it conscious selection of which data a firm provides via the internet. Hyperlinks can be included to point to various other sources, including the auditor's report, which may or may not be appropriate in the context, or to external sources like a favourable analyst report. With XBRL, firms may have incentives to become creative in their tagging: For

example, because investors will be tempted to work with the data provided by the extracting software, and without double checking all details, a company that wishes to hide a certain piece of information may well attempt to not tag it, to place it in a certain tag, or to define an individual tag. To assure the quality of disclosures, the auditor would have to check whether the assignment of tags was meticulously performed.

Another issue affecting information quality is the security of the website. It may be difficult to control who has access to the website or its underlying database. Needless to say, fraud hostile intruders, and hackers can and do find holes in the security net and alter data without knowledge of the company.

Issues like these suggest that financial disclosure provided via the internet is less credible than is information from other company source. The credibility is not only of concern to companies and users, but also to auditors and regulators.

One way to cope with these concerns is to restrict the opportunities the internet offers to those that are less affected by such possibilities. For example, auditors may decide not to allow links to and from the auditor's report, or to require that it be stored on the auditor's own or on an official registrar's website. Actually, the most common practice is to provide the annual report in a read-only PDF format. Such formats can be interpreted as assuring the internet user of the boundaries and quality of the information.

3 Data and methodology

This section describes the research design of the study including sample description, variable measurement, data collection and data analysis.

3.1 Sample

Sample of this research consist of firms that listed on Indonesia Stock Exchange. Sample of this research divided into three sub samples: banking sector, LQ-45 firms and firms which not included ob banks industry and LQ-45 firms. Exploring banking sector is due to the fact that this fully regulated industry sector in Indonesia and LQ-45 firms are firms with highest stock trading. LQ-45 firms are forty-five firms that have liquid share in the Indonesia Stock Exchange. The screening of the corporate websites was carried out in November 2007 and February 2008.

3.2 Variable measurement

An IFR index was developed by basing closely on the work of Cheng et al. (2000). The IFR index tended to favour the importance of technology rather than the content of financial statements. For example, a company that discloses a full set of financial statements in PDF format for one year could gain only 6%. This score to be too low when compared with the usefulness of the content. Therefore, in order to add weight to content over technology enhancements, the index criteria were divided into four parts and assigned weights – content (40%), timeliness (20%), technology (20%) and user support (20%). Three new items were added to the checklist, namely company address, and language, under content, and proper disclaimer under timeliness. IFR disclosure instruments are content, timeliness, technology and user support.

- *Content:* this category includes the components of financial information from statement of financial positi, cash flow through shareholder information and social responsibilities disclosures. Financial information disclosed in html format scores higher (two-points) than disclosure in PDF format (one-point), since the former makes better use of the web technology and as a result it is easier for users to access effectively. A copy of the content index is attached as Appendix 1.
- *Timeliness:* since the web can provide information in real time it is important to find out the extent to which this facility is utilised. These real time data include press release, unaudited latest quarterly results, vision/forward-looking statements, and charts of future profits forecast. For disclosure of press releases and stock quotes, there is an added score for the recently of information (on a scale from zero to three). Companies receive a score for disclosing unaudited quarterly results and vision statements and a score is also given for appropriate disclaimers. This is included since companies may face potential legal risk if they endorse the unaudited or forward looking statements and omit meaningful cautionary disclaimers. A copy of the timeliness index is attached as Appendix 2.
- *Technology:* these item related to enhancements that cannot be provided by printed report. Those items that uphold that quality of the electronic financial reporting and facilitate communication with site users score highly on the index. The elements are download plug-in on spot, online feedback, use o presentation slides, use of multimedia technologies (audio and video clips), analysis tools (for example, Excel's pivot table), advanced features (such as implementing an 'intelligent agent' or XBRL). A copy of the technology index is attached as Appendix 3.
- *User support:* users' computer skills are different. Some of them are experts, some are novice. Those who do not have state-of-the-art technology may find themselves unable to use a site at all. Companies score is higher if they implement tools that faci te use of the IFR irrespective of computer skills. The tools scored in the index are: search and navigation tools (such as FAQ, links to homepage, site search), number of clocks to get financial information (on a scale from zero to three), and consistency of web page design. A copy of the user support index is attached as Appendix 4.

3.3 Data analysis

The purpose of this study was to measure and compare the quality of IFR of the banks industry, LQ-45 firms and firms which not included on banks industry and LQ-45 firms on the Jakarta Stock Exchange. This study compare the banks industry, LQ-45 firms and firms which not included on banks industry and LQ 45 firms because banking sector are fully regulated sector in Indonesia and LQ 45 firms are firms with highest stock trading. *One sample Kolmogrov Smirnov test* use for examining variable normality, if variables have normal distribution, *t-test* use to examine practice differences of content, timelines, technology, user support and IFR index for three group samples. *Mann Whitney test* use to examine differences of content, timelines, technology, user support and IFR index for three group samples, if variables have not normal distribution.

4 Result

Out of a total of 343 quoted companies, 213 (62%) are listed as having websites. Larger companies are far more likely to have a website: twenty-six of the IBEX-35 companies (74.2%) have sit The seventy website listed were examined in December 2007 until November 2008. Certain company sectors are far m likely to use websites for mining and mining service (100%) and construction (100%) than others (see Table 1).

Table 1 Companies listed on the Indonesia Stock Exchange which has websites

No.	*Sector*	*Total number of companies*	*Companies with websites*	*% Have websites*
1	Agriculture, forestry and fishing	9	7	78
2	Animal feed and husbandry	6	2	33
3	Mining and mining service	12	12	100
4	Constructions	4	4	100
5	Manufacturing	142	93	65
6	Transportation service	12	7	58
7	Telecommunication	6	5	83
8	Whole sale and retail trade	16	5	31
9	Banking	26	18	69
10	Credit agencies, securities and insurance	40	22	55
11	Real estate	39	17	44
12	Hotel and travel service	6	5	83
13	Holding and other investment companies	4	2	50
14	Others	21	11	52
	Total	343	213	62

Based on Table 1 indicate that the practice of the use of IFR for a publicly listed company in Indonesia is a new phenomenon. This is due to a lack of awareness of the Company's management about the importance of exploiting the company's website as tools of communication and investment.

Table 2 Descriptive statistic past financial information and language

Past financial information	*Sample*	*%*
Annual reports	88	77
Quarterly reports	61	53
Stock quote	41	36
Graph of stock price	20	17
Language: only English	62	54
Language: only Indonesian	23	20
Language: bilingual (English and Indonesian)	28	24

Table 3 Descriptive statistic content component

		Sample	*%*
1	*Statement of financial position*		
	PDF	82	71
	HTML	21	18
	PDF and HTML	14	12
	None	26	23
2	*Statement of financial performance*		
	PDF	82	71
	HTML	21	18
	PDF & HTML	14	12
	None	26	23
3	*Statement of cash flow*		
	PDF	82	71
	HTML	6	5
	PDF and HTML	1	1
	None	28	24
4	*Statement of movement in equity*		
	PDF	82	71
	HTML	7	6
	PDF & HTML	5	4
	None	31	27
5	*Notes to financial statement*		
	PDF	81	70
	HTML	4	3
	PDF and HTML	3	3
	None	33	29
6	*Disclosures of quarterly results*		
	PDF	58	50
	HTML	21	18
	PDF and HTML	2	2
	None	38	33
7	*Financial highlight/year-in-review*		
	PDF	24	21
	HTML	44	38
	Growth rates, ratios, charts	24	21
	None	48	42

4.1 Descriptive statistic content component

Table 2 shows that 88 firms (77%) disclose their annual report, 61 firms (53%) disclose their quarterly report, 41 firms (36%) explore their history stock quote and 20 firms (17%) explore their graph of history stock price. From Table 2, shows that 28 firms (24%) use bilingual version (Indonesian and English version). Of the 115 samples, 62

firms (54%) use English version to inform their information and 23 firms (20%) firms use Indonesian version.

Based on Table 2 indicate low utilisation of the company's website to inform the company's financial statements. By utilising the website to submit company's financial statements show the transparency practices operated by the company in achieving good corporate governance. The results also showed that the low utilisation of graphic information within the company's website (only 17% of companies that convey information using graphic media), because the information that provided by the company in graphical form will be easier to interpret.

Some companies do not show their financial statements in the website but some companies display both the full financial statements (annual financial reports and quarterly financial reports). In Table 3, it appears that of 115 companies, there are around 26 companies to 48 companies that did not disclose the complete financial statements. It appears also that many companies simply put their financial reports in PDF format into the company's website, but with internet technology can be used facilities provided technology to make financial reports more high-value benefits (for example, can be used to predict the company future performance) or the use of multi media.

Although the report in digital from provides investors with the opportunity to download files that can be used as input in computer-based analysis at very low cost, it is rather surprising that only 1% or 5% of the samples provided analysis tools or allowed users to download data for analysis. One reason for the reluctance to allow users to create their own financial analyses may be an unwillingness to provide more information than can be found in the traditional paper-based reporting. In Table 4, show that not much firms use technology in the internet such as download plug-in on spot, presentation slides, multimedia technology, analysis tools and advanced features (XBRL). Although XBRL is emerging, and its benefits are quite obvious, such as shortening implementation times and alleviating errors, no companies in the sample were found to be using the XBRL format to create their website.

Table 4 Descriptive statistic technology component

No.	*Technology component*	*Sample*	*%*
1	Download plug-in on spot	0	0
2	Online feedback and support	16	14
3	Use presentation of slides	8	7
4	Use multimedia technology	11	10
5	Analysis tool	1	1
6	Advance features (XBRL)	0	0

The use of component technology in the company's website is limited; it can be shown in Table 4. Of the 115 companies that are observed none of the companies that use technologies component download plug-ins on the spot and XBRL on corporate websites. In Table 1 also shows the very limited use of component technology companies going public on the website of 16 firms or about 14% of the companies that were observed using an online feedback and support, eight companies (7%) utilise a slide presentation, 11 companies (10%) make use of multimedia technology, and the first company (1%) use the analysis tool. This indicates that although the company has a website, but the company has not make the most of existing technology when the company using the

website, so we need explore more about the constraints and obstacles that companies face when developing web-based information systems.

The type and number of user support facilities on the LQ 45 firms' websites are shown in Table 5. Even though FAQ is useful for companies in reducing the number of incoming e-mails, there are three (9%) LQ 45 firms in the sample offered FAQ on their websites. In this category, links to homepage and links to top were assessed. There are 32 firms of the LQ 45 firms in the sample provide a link to homepage on their websites, and there is one (3%) firm provided a link to the top. This may be because many companies present their annual report in PDF format, which is incompatible with this technology. A site map is very useful as it can show the structure of the website on just one page. However, there are 19 firms provide site maps on their websites. Relatively most firms of LQ 45 firms (57%) provided a site search instrument on their websites.

Table 5 Descriptive statistic user support component

No.	*User support component*	*Sample*	*%*
1	Help and frequently asked question	18	16
2	Link to homepage	109	95
3	Link to top	15	13
4	Sitemap	49	43
5	Site search	58	50
6	Consistency of web page design	113	98

Utilisation of user support component in the company's website is not maximal; it can be shown in Table 5. Of the 115 companies that are observed, it indicates that companies that utilise the facility at least help and frequently asked question, i.e., only as many as 18 companies or 16% of the companies that are observed. In Table 2 also shows the use of components of user support companies going public on the website that is not maximum 109 firms or about 95% of the companies that are observed using a link to the homepage, 15 companies (13%) use the links to top, 49 companies (10%) use sitemap, 58 companies (50%) use the site search, and 113 firms (98%) has the consistency of web page design. This indicates that although the company has a website, but the company has not make the most of existing technology when the company using the website, so we need explore more about the constraints and obstacles that companies face when developing web-based information systems.

4.1.1 Comparing IFR score

Sample of this research contains 115 companies of 213 companies with websites. The descriptive statistic of IFR score between banks sector, LQ 45 firms and firms which not included on banks industry and LQ 45 are shown in Table 6. There are differences on content, timelines, technology, user support and total score of IFR score between banks industry, LQ 45 firms and firms which not included on banks industry and LQ 45.

Table 6 shows that content component for LQ 45 firms (23.83) and timelines component for LQ 45 firms (8.34) have highest mean score than the other group sample. Table 6 also shows that technology component for bank industry (2.5) and user support component for bank industry (12.94) have highest mean score than the other group

sample. For all total score in Table 6 shows that banking industry has highest score on IFR quality.

Table 6 Descriptive statistic IFR index

Variable	*Sample group*	*N*	*Mean*	*Minimum*	*Maximum*
Content	Bank	18	22.111111	14.5000	37.0000
	LQ 45	35	*23.835714*	5.0000	35.0000
	Non-bank and LQ 45	62	13.725806	2.0000	38.0000
Timelines	Bank	18	8.138889	2.0000	12.0000
	LQ 45	35	*8.342857*	2.0000	12.5000
	Non-bank and LQ 45	62	2.395161	.0000	10.0000
Technology	Bank	18	*2.500000*	.0000	13.0000
	LQ 45	35	.057143	.0000	2.0000
	Non-bank and LQ 45	62	.919355	.0000	4.0000
User	Bank	18	*12.944444*	3.0000	15.0000
Support	LQ 45	35	7.742857	2.0000	15.0000
	Non-bank and LQ 45	62	5.209677	1.0000	11.0000
Total	Bank	18	*45.694444*	22.0000	64.5000
	LQ 45	35	39.978571	12.0000	55.5000
	Non-bank and LQ 45	62	22.250000	5.0000	62.5000

Most of the companies in the sample do not take full advantage of the computer technologies and user support. Only one bank allows users to download financial information or provided analysis tool for users to make their own analyses. The common technology feature provided by the banks is the download plug-in spot, but none of the sample provided downloads plug-in spot. Another common feature is online feedback. None of the banks used advanced futures (XBRL) to create their websites.

The difference of IFR score between banks sector and LQ 45 firms are shown in Table 7. There are differences on content, timelines, technology, user support and total score of IFR score between three groups sample. Table 7 shows that content, timelines, technology, user support and total score component have a significant differences for three group sample.

Table 7 Kruskal Wallis test

	Content	*Time*	*Tech*	*Support*	*Total*
Chi-square	32.190	55.915	30.727	43.072	48.674
Df	2	2	2	2	2
Asymp. Sig.	.000	.000	.000	.000	.000

5 Concluding comments

Using a corporate website to disclose financial and business information, it has become commonplace for most firms. Communication possibilities that go far beyond that achievable by traditional means are the advantage offered by web-based corporate

reporting. However, the mere existence of a corporate websites does not automatically mean that the quantity and quality of information available is of a uniform high standard.

Although possibilities offered by the internet technology for more symmetrical information have been well identified, some critical issues to be considered yet include the coverage and depth of information, the frequency and time, the format, which are responsible for deciding, verifying and posting online. Some research (for example Deller et al., 1999) also finds that most websites were found to make relatively unsophisticated use of internet technology. The option to engage an interactive activity with users, like video/audio recording and online participation in general meeting, was rarely found.

In fact, most disclosures other than annual financial statements are unaudited, and so could be internet disclosures. Some stock exchange and regulators have issued guidelines which include certain principles that financial disclosure on the internet should follow. In the future, we can expect to increasing regulation of financial disclosure in the internet. Commitment to IFR is a concept that deserves more future research. It is important to investigate this issue further, because advances in internet technology will eventually bring the potential for the real-time-reporting closer to reality.

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Appendix 1

Table A1 The content index of internet disclosure instruments

Index items		*Explanations*	*Score*	*Multiplier*	*Max*
1	*Component of financial information*				
1.1	*Statement of financial position*				
	Pdf	1 = yes, 0 = no	1	1	1
	HTML	1 = yes, 0 = no	1	2	2
1.2	*Statement of financial performance*				
	Pdf	1 = yes, 0 = no	1	1	1
	HTML	1 = yes, 0 = no	1	2	2
1.3	*Statement of cash flows*				
	Pdf	1 = yes, 0 = no	1	1	1
	HTML	1 = yes, 0 = no	1	2	2
1.4	*Statement of movement in equity*				
	Pdf	1 = yes, 0 = no	1	1	1
	HTML	1 = yes, 0 = no	1	2	2
1.5	*Notes to the financial statement*				
	Pdf	1 = yes, 0 = no	1	1	1
	HTML	1 = yes, 0 = no	1	2	2
1.6	*Disclosures of quarterly results*				
	Pdf	1 = yes, 0 = no	1	1	1
	HTML	1 = yes, 0 = no	1	2	2

Table A1 The content index of internet disclosure instruments (continued)

Index items			*Explanations*	*Score*	*Multiplier*	*Max*
1	*Component of financial information*					
	1.7	*Financial highlight/year-in-review*				
		Pdf	1 = yes, 0 = no	1	1	1
		HTML	1 = yes, 0 = no	1	2	2
		Growth rate, ratios, charts	1 = yes, 0 = no	1	2	2
	1.8	*Chairman's report*				
		Pdf	1 = yes, 0 = no	1	1	1
		HTML	1 = yes, 0 = no	1	2	2
	1.9	*Auditors' report*				
		Pdf	1 = yes, 0 = no	1	1	1
		HTML	1 = yes, 0 = no	1	2	2
	1.10	*Stakeholder information*				
		Pdf	1 = yes, 0 = no	1	1	1
		HTML	1 = yes, 0 = no	1	2	2
	1.11	*Corporate information*				
		Pdf	1 = yes, 0 = no	1	1	1
		HTML	1 = yes, 0 = no	1	2	2
	1.12	*Social responsibility*				
		Pdf	1 = yes, 0 = no	1	1	1
		HTML	1 = yes, 0 = no	1	2	2
2	*Number of years/quarters shown*					
	Annual report		No. of years	1	0.5	2
	Quarterly report		No. of quarters	1	0.5	2
3	*Past information (HTML only)*					
	Annual report		1 = yes, 0 = no	1	1	1
	Quarterly report		1 = yes, 0 = no	1	1	1
	Graph of share price		1 = yes, 0 = no	1	2	2
4	*Language*					
	English		1 = yes, 0 = no	1	2	2
	Other than English or		1 = yes, 0 = no	1	1	1
5	*Address (HTML only)*					
	Company Address		1 = yes, 0 = no	1	1	1

Appendix 2

Table A2 The timeliness index of internet disclosure instruments

Index items	*Explanations*	*Score*	*Multiplier*	*Max*	
1 Press releases					
Existence	1 = yes, 0 = no	1	2	2	
Number of days since last updated news	See note 1	1	1	3	Note 1: Press Release
2 Unaudited latest quarterly result (3 = updated on the date of investigation)					
Existence	1 = yes, 0 = no	1	2	2	2 = 1 week or less before the date of investigation
With proper disclaimer	1 = yes, 0 = no	1	1	1	1 = 2 weeks or less before the date of investigation
3 Stock quote (0 = news is updated more than 2 weeks ago)					
Existence	1 = yes, 0 = no	1	2	2	
Updated in how many hours	See note 2	1	1	3	Note 2: Stock Quote
4 Vision statement/forward looking statement (3 = updated every hour or less)					
Existence	1 = yes, 0 = no	1	2	2	2 = update every day or less
Proper disclaimer	1 = yes, 0 = no	1	1	1	1 = updated every week or less
Charts of future profit forecasts/trends	1 = yes, 0 = no	1	1	1	0 = updated every week or less

Appendix 3

Table A3 The technology index of internet disclosure instruments

Index items	*Explanations*	*Score*	*Multiplier*	*Max*
Download plug-in on spot	1 = yes, 0 = no	1	2	2
Online feedback	1 = yes, 0 = no	1	2	2
Use of presentation slides	1 = yes, 0 = no	1	2	2
Use of multimedia technology	1 = yes, 0 = no	1	3	3
Analysis tools	1 = yes, 0 = no	1	4	4
Advance features (XBRL)	1 = yes, 0 = no	1	5	5

Appendix 4

Table A4 The user support index of internet disclosure instruments

Index items	*Explanations*	*Score*	*Multiplier*	*Max*	
Help and frequently asked questions	1 = yes, 0 = no	1	2	2	
Link to home page	1 = yes, 0 = no	1	1	1	
Link to top	1 = yes, 0 = no	1	1	1	
Site map	1 = yes, 0 = no	1	2	2	
Site search	1 = yes, 0 = no	1	2	2	Note 3: Number of clicks to get to financial Info
Number of clicks to get to financial info	See note 3	1	1	3	3 = 1 clicks
Consistency of web page design	0 = poor, 1 = fair, 2 = good	1	2	4	2 = 2 clicks

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